Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-9. **(Canceled)**

10. **(Currently Amended)** An antibody, comprising:

~~at least one point~~ points of conjugation for a cytotoxic or cytostatic agent, wherein [[the]] at least one point of conjugation for the cytotoxic or cytostatic agent on the antibody can be readily assigned, and wherein less than all possible points[[are]] of conjugation are available for conjugation to the cytotoxic or cytostatic agent.

11. **(Currently Amended)** The antibody of claim 10, wherein the ~~points~~ at least one readily-assignable point of conjugation ~~are~~ is an interchain ~~thiols~~ thiol, and the antibody comprises at least one interchain disulfide bond.

12. **(Canceled)**

13. **(Currently Amended)** The antibody of claim[[10]] 11, wherein the antibody has four points of conjugation, and wherein the ~~point of conjugation is~~ antibody has a configuration of an antibody species selected from ~~at least one of~~ the group consisting of species 4A, 4B, 4C, 4D, 4E and ~~through~~ 4F of Figure 1.

14-33. **(Canceled)**

34. **(Currently Amended)** A method of reducing and conjugating a drug to an antibody resulting in selectivity in the placement of the drug, comprising:

fully reducing the antibody with a reducing agent;

treating the fully reduced antibody with limiting amounts of a reoxidizing agent to reform at least one interchain disulfide bond of the antibody, such that at least two interchain thiols remain; and

conjugating the drug to ~~the~~ one interchain ~~thiols~~ thiol.

35. **(Original)** The method of claim 34, wherein the reoxidizing agent is 5,5'-dithio-bis-2-nitrobenzoic acid, 4,4'-dithiodipyridine, 2,2'-dithiodipyridine, sodium tetrathionate or iodosobenzoic acid.

36. **(Currently Amended)** The method of claim ~~34~~ 35, wherein the drug is a cytotoxic or cytostatic agent or an immunosuppressive agent.

37. **(Currently Amended)** The method of claim ~~34~~ 36, wherein the cytotoxic or cytostatic agent is a minor grove binder, AEB, ~~or~~ AEVB, MMAF, MMAE, or AFP.

38. **(Currently Amended)** The method of claim 34, wherein ~~the drug is MMAF, MMAE, or AFP~~ at least two drugs are conjugated to the antibody and each drug is conjugated to one interchain thiol.

39. **(Original)** The method of claim 34, wherein the reducing agent is DTT or TCEP.

40-42. **(Canceled)**

43. **(Currently Amended)** The method of ~~claims 40~~ claim 34, further comprising purifying the partially reoxidized antibody.

44. **(Canceled)**

45. **(Currently Amended)** A method of reducing antibody interchain disulfide bonds and conjugating a drug to the resulting interchain thiols to selectively locate the ~~drug~~ drugs on the antibody, comprising:

partially reducing the antibody with a reducing agent to form at least two interchain thiols; and

conjugating the drug to ~~the~~ one interchain ~~thiols~~ thiol of the partially reduced antibody.

46. **(Original)** The method of claim 45,

wherein the antibody is partially reduced with a limiting concentration of a reducing agent in a buffer with a chelating agent; and

wherein the drug is conjugated by cooling the antibody solution and dissolving the drug in a cold solvent and mixing with the antibody solution;

allowing the antibody and drug solution to incubate for a period of time sufficient to form an antibody-drug conjugate;

quenching the excess drug with a thiol-containing reagent; and

purifying the resulting conjugate.

47. **(Currently Amended)** The method of claim[[46]]45, wherein ~~the antibody is partially reduced for about 1 hour at about 37 °C~~ at least two drugs are conjugated to the resulting interchain thiols and each drug is conjugated to one interchain thiol.

48-49. **(Canceled)**

50. **(Currently Amended)** The method of claim ~~45~~ 46, wherein the thiol-containing reagent is cysteine or N-acetyl cysteine.

51. **(Original)** The method of claim 45, wherein the reducing agent is DTT or TCEP.

52. **(Original)** The method of claim 46, wherein the buffer is a sodium borate solution and the chelating agent is dethylenetriaminepentaacetic acid.

53. **(Original)** The method of claim 46, wherein the chelating agent is ethylenetriaminepentaacetic acid or EDTA.

54. **(Original)** The method of claim 45, further comprising purifying the reduced antibody.

55-57. **(Canceled)**

58. **(Original)** The method of claim 45, wherein the reduced antibody is not purified after partial reduction and prior to conjugation.

59-61. **(Canceled)**

62. **(Currently Amended)** The method of claim ~~45~~ 46, wherein the solvent is acetonitrile, alcohol or DMSO.

63. **(Original)** The method of claim 45, wherein the drug is a cytotoxic or a cytostatic agent.

64. **(Currently Amended)** A method of producing an antibody with selective conjugation of a drug comprising:

fully reducing the antibody for a period of time sufficient to produce interchain thiols, as determined by DTNB titration, by adding a large excess of a reducing agent and incubating the solution at about 37 °C for about 30 minutes;

purifying the antibody;

partially reoxidizing the antibody using an oxidizing agent to form at least one interchain disulfide bond by

cooling the reduced antibody to 0 °C;

treating the reduced and cooled antibody with 1.5 to 2.5 molar equivalents of the oxidizing agent;

mixing the solution by inversion;

allowing the solution to incubate at about 0 °C for about 10 minutes;

purifying the partially reoxidized antibody;

conjugating the drug to ~~the~~ one interchain ~~thiols~~ thiol of the partially reoxidized antibody to form a conjugated antibody; and

purifying the conjugated antibody.

65. **(Currently Amended)** The method of claim 64, wherein ~~the reducing agent is DTT or TCEP~~ at least two drugs are conjugated to the antibody and each drug is conjugated to one interchain thiol.

66-72. **(Canceled)**

73. **(Currently Amended)** A method of preparing a conjugate of a protein having one or more disulfide bonds and a drug, ~~and a drug reactive with free thiols, which comprises~~ comprising:

partially reducing the protein with a reducing agent; and

conjugating the drug reactive with free thiols to the partially reduced protein.

74. **(Currently Amended)** A method of preparing a conjugate of a protein having one or more disulfide bonds and a drug, ~~and a drug reactive with free thiols, which comprises~~ comprising:

fully reducing the protein with a reducing agent;

partially reoxidizing the protein with a reoxidizing agent; and

conjugating the drug reactive with free thiols to the ~~antibody~~ protein.

75. **(Currently Amended)** A method of forming ~~a partially loaded~~ an antibody that is partially loaded with a drug, ~~comprising:~~ comprising:

providing a solution containing an ~~antibody,~~ antibody;

adjusting the pH of the antibody solution to about pH 7.5 and adding a chelating agent;

heating the antibody solution to about 37 °C;

adding a molar excess of TCEP to the antibody solution and reacting for a sufficient period of time at about 37 °C to partially reduce the interchain disulfide groups of the antibody to form interchain thiols;

cooling the antibody solution to between about 2-8 °C;

conjugating the drug to ~~the~~ one interchain ~~thiols~~ thiol of the partially reduced antibody by adding a slight molar excess of the drug to the antibody solution and reacting for a sufficient period of time to form the partially loaded antibody; and

purifying the partially loaded antibody.

76. **(New)** A partially loaded, modified protein, comprising:

a binding region for interaction with a binding partner;

at least two points of conjugation having a similar accessibility or activability for conjugation of a drug or label by chemical means;

at least two drugs or labels, each drug or label covalently linked to one point of conjugation;

wherein less than all of the possible points of conjugation having a similar accessibility or activability are linked to a drug or label.

77. **(New)** The modified protein of claim 76, wherein the protein comprises an antibody, a receptor, a receptor ligand, a hormone, or a cytokine.

78. **(New)** The modified protein of claim 76, wherein the points of conjugation are thiol groups, amino groups, vicinal hydroxyl groups, hydroxyl groups, or carboxyl groups.

79. **(New)** The modified protein of claim 77, wherein:

the protein is an antibody;

the binding region is an antigen-binding domain of the antibody;

the points of conjugation are thiol groups; and

the antibody comprises at least one interchain disulfide bond.

80. **(New)** The modified protein of claim 79, wherein a thiol group is a thiol group of a cysteine residue.

81. **(New)** The modified protein of claim 80, wherein the thiol group is a thiol group of a cysteine residue of an interchain disulfide bond.

82. **(New)** The modified protein of claim 81, wherein each drug or label is conjugated to a thiol group of a cysteine residue of an interchain disulfide bond.

83. **(New)** The modified protein of claim 79, wherein at least one thiol group is formed by alkylation of the epsilon amino group of a lysine residue.

84. **(New)** The modified protein of claim 76, wherein two drugs are conjugated to the modified protein.

85. **(New)** The modified protein of claim 79, wherein two drugs are conjugated to the modified protein.

86. **(New)** The modified protein of claim 76, wherein the drug is a cytotoxic or cytostatic drug or an immunosuppressive agent.

87. **(New)** The modified protein of claim 79, wherein the drug is a cytotoxic or cytostatic drug or an immunosuppressive agent.

88. **(New)** The modified protein of claim 87, wherein the antibody comprises at least four cytotoxic or cytostatic drugs, each drug conjugated to an interchain thiol.

89. **(New)** The modified protein of claim 79, wherein the conjugated antibody has the configuration of species 4A, 4B, 4C, 4D, 4E, or 4F of Figure 1.

90. **(New)** The modified protein of claim 79, wherein the antibody is a humanized or chimeric antibody.

91. **(New)** The modified protein of claim 87, wherein the drug is AEB, AEVB, MMAF, MMAE, or AFP.

92. **(New)** A composition of modified antibodies, comprising:

at least two species of th modified antibody of claim 79, wherein the species are selected from species 4A, 4B, 4C, 4D, 4E or 4F of Figure 1.

93. **(New)** A pharmaceutical composition comprising the modified protein of claim 76 and a pharmaceutically acceptable carrier.

94. **(New)** A pharmaceutical composition comprising the modified protein of claim 79 and a pharmaceutically acceptable carrier.

95. **(New)** The pharmaceutical composition of claim 94 wherein a thiol group is a thiol group of a cysteine residue.

96. **(New)** The pharmaceutical composition of claim 95, wherein the thiol group is a thiol group of a cysteine residue of an interchain disulfide bond.

97. **(New)** The pharmaceutical composition of claim 96, wherein each drug or label is conjugated to a thiol group of a cysteine residue of an interchain disulfide bond.

98. **(New)** The pharmaceutical composition of claim 94, wherein a thiol group is formed by alkylation of the epsilon amino group of a lysine residue.

99. **(New)** The pharmaceutical composition of claim 94, wherein two drugs are conjugated to the modified protein.

100. **(New)** The pharmaceutical composition of claim 94, wherein the drug is a cytotoxic or cytostatic drug or an immunosuppressive agent.

101. **(New)** The pharmaceutical composition of claim 100, wherein the antibody comprises at least four cytotoxic or cytostatic drugs, each drug conjugated to an interchain thiol.

102. **(New)** The pharmaceutical composition of claim 94, wherein the conjugated antibody has the configuration of species 4A or 4B, 4C or 4D, 4E, or 4F of Figure 1.

103. **(New)** The pharmaceutical composition of claim 94, wherein the antibody is a humanized or chimeric antibody.

104. **(New)** The pharmaceutical composition of claim 100, wherein the drug is AEB, AEVB, MMAF, MMAE, or AFP.

105. **(New)** The pharmaceutical composition of claim 94, wherein there is an average of 4 drugs per antibody.

106. **(New)** The pharmaceutical composition of claim 94, wherein there is an average of 2 drugs per antibody.

107. **(New)** A method for the treatment of cancer, immune disease, autoimmune disease or infectious disease in a patient, comprising administering to the patient an amount of the modified protein of claim 10.

108. **(New)** A method for the treatment of cancer, immune disease, autoimmune disease or infectious disease in a patient, comprising administering to the patient an amount of the modified protein of claim 76.

109. **(New)** The method of claim 108 wherein:
the protein is an antibody;
the binding region is an antigen-binding domain of the antibody;
the points of conjugation are thiol groups; and
the antibody comprises at least one interchain disulfide bond.

110. **(New)** A method for the treatment of cancer, immune disease, autoimmune disease or infectious disease in a patient, comprising administering to the patient an amount of the pharmaceutical composition of claim 93.

111. **(New)** The method of claim 110 wherein;

the protein is an antibody;

the binding region is an antigen-binding domain of the antibody;

the points of conjugation are thiol groups; and

the antibody comprises at least one interchain disulfide bond.

112. **(New)** The method of claim 75, wherein at least two drugs are conjugated to the antibody and each drug is conjugated to one interchain thiol.